

## ABSTRACT

In a disclosed embodiment, a "voice noise power" is added to an aggregate voice power which is the total voice power used by all users in a cell. The voice noise power is transmitted in addition to the aggregate voice power in order to maintain the total of the aggregate voice power and voice noise power at a pre-determined voice power limit. In one embodiment, the voice power limit can be increased or decreased to further improve control over power consumption during voice and data transmission. Further, in order to maintain the power consumed by data transmission at a desired level, data noise is transmitted after transmission of a data burst, or in between data bursts, by inserting a pre-determined amount of artificial data into the gaps in data transmission. The data noise is transmitted in addition to the data bursts in order to maintain the total power consumed during data transmission at a desired level.